WHAT IS CLAIMED IS:

1. A method for prioritizing event datum received from a plurality of asynchronous telemetric streams within a system, the method comprising:

receiving an event from one of the streams;

determining whether a value of the event is less than a previously recorded minimum value for the stream, and if the value of the event is less than the previously recorded minimum value, updating the recorded minimum value to the value of the event;

determining whether the value of the event is greater than a previously recorded maximum value for the stream, and if the value of the event is greater than the previously recorded, updating the recorded maximum value to the value of the event;

generating a normalized event value based upon the value of the event, the recorded minimum value, and the recorded maximum value;

determining a system threat level as a percentage of the streams that exhibit an alarm state;

calculating a normalized rate of change of the stream;

calculating a first exponential average based upon the determined threat level and a threat level previously stored in a first table providing a correlation between system threat levels and normalized event values;

calculating a second exponential average based upon the determined threat level and a threat level previously stored in a second table providing a correlation between system threat levels and normalized stream rates of change; and

calculating a priority of the stream based upon a predetermined relationship between the first exponential average, the second exponential average, and an alarm status indicator associated with the stream.

2. The method of claim 1, wherein

the first exponential average comprises a number in a range from 0 to 100, the second exponential average comprises a number in a range from 0 to 100, and the alarm status indicator comprises either 1 or 0; and

calculating a priority of the stream comprises dividing the sum of the first exponential average and second exponential average by 4 and adding to a resulting value a product of the alarm status indicator and 50.

3. The method of claim 1, wherein the predetermined relationship between the first exponential average, the second exponential average, and the alarm status indicator provides for predetermined weightings of the first exponential average, the second exponential average, and the alarm status indicator.

4. A method for prioritizing event datum received from a plurality of streams within a system, the method comprising:

receiving an event value from a stream;

generating a normalized event value based upon the received event value;

calculating a normalized rate of change of the stream;

determining a system threat level based upon a number of alarm status indications associated with the plurality of streams;

calculating a first exponential average based upon the determined threat level and a threat level previously stored in a first table providing a correlation between system threat levels and normalized event values;

calculating a second exponential average based upon the determined threat level and a threat level previously stored in a second table providing a correlation between system threat levels and normalized stream rates of change; and

calculating a priority of the stream based upon a predetermined relationship between the first exponential average, the second exponential average, and an alarm status indicator associated with the stream.

5. A method for prioritizing event datum received from a plurality of streams within a system, the method comprising:

receiving an event from one of the streams;

determining a current state of system health;

generating a current normalized event value and a current normalized stream rate of change value; and

defining a priority for the stream based upon a predetermined relationship between the current state of system health, the current normalized event value, the current normalized stream rate of change value, previously stored normalized event values, previously stored stream rate of change values, and an alarm status indicator associated with the stream.

6. The method of claim 5 wherein defining a priority further comprises:

calculating a first exponential average based upon the current state of system health and a state of system health previously stored in a first table providing a correlation between system health and normalized event values;

calculating a second exponential average based upon the current state of system health and a state of system health previously stored in a second table providing a correlation between system threat levels and normalized stream rates of change; and

calculating a priority of the stream based upon a predetermined relationship between the first exponential average, the second exponential average, and the alarm status indicator associated with the stream.

7. The method of claim 6, wherein

the first exponential average comprises a number in a range from 0 to 100, the second exponential average comprises a number in a range from 0 to 100, and the alarm status indicator comprises either 1 or 0; and

the calculating a priority of the stream comprises dividing the sum of the first exponential average and second exponential average by 4 and adding to a resulting value a product of the alarm status indicator and 50.

8. A computer program product for use in an event monitoring system, the computer program product comprising instructions that, when executed by a processor, cause the processor to:

get an event from a stream selected from a plurality of streams;

determine a current normalized event value and a current normalized rate of change of event values for the stream;

determine a level of current system health;

evaluate a historic relationship between levels of system health, normalized event values for the stream, and normalized rates of change of event values for the stream;

predict an effect upon system health that is likely to occur based upon the determined current normalized event value for the stream, the determined current normalized rate of change of event values for the stream, and the evaluated historic relationship; and

determine a priority for the event based upon the predicted effect.

9. An event monitoring system comprising:

a plurality of asynchronous telemetric streams;

a nexus coupled to the plurality of asynchronous telemetric streams; and

a processor associated with the nexus, the processor being configured to implement a historic learning methodology for assigning priorities to events received at the nexus from the streams.

10. An event monitoring system comprising:

a nexus for receiving a plurality of events generated by a corresponding plurality of asynchronous telemetric streams, and

means for assigning priority to the received events based upon a historic learning analysis.

11. An event prioritization system for using in monitoring a plurality of data streams generated by a communications network, the event prioritization system comprising:

a plurality of agent applications for monitoring selected parameters descriptive of a functionality of the communications network, each such agent generating an independent data stream and delivering the generated stream to a common nexus, and

a processor associated with the common nexus, the processor being configured to execute a historic learning algorithm to assign priorities to event datum received from the data streams generated by the agents.

12. The event prioritization system of claim 11, wherein the processor executes a set of programming instructions for causing the processor to

receive an event from one of the streams;

determine whether a value of the event is less than a previously recorded minimum value for the stream, and if the value of the event is less than the previously recorded minimum value, update the recorded minimum value to the value of the event;

determine whether the value of the event is greater than a previously recorded maximum value for the stream, and if the value of the event is greater than the previously recorded, update the recorded minimum value to the value of the event;

generate a normalized event value based upon the value of the event, the recorded minimum value, and the recorded maximum value;

determine a system threat level as a percentage of the streams that exhibit an alarm state;

calculate a normalized rate of change of the stream;

calculate a first exponential average based upon the determined threat level and a threat level previously stored in a first table providing a correlation between system threat levels and normalized event values;

calculate a second exponential average based upon the determined threat level and a threat level previously stored in a second table providing a correlation between system threat levels and normalized stream rates of change; and

calculate a priority of the stream based upon a predetermined relationship between the first exponential average, the second exponential average, and an alarm status indicator associated with the stream.

Patent Application Publication